

DESCRIPTIONS OF NEW SPECIES OF AUSTRALIAN
COLEOPTERA. PART xiii.

BY ARTHUR M. LEA, F.E.S.

(Plate xxix.)

SCARABÆIDÆ.

DIPHUCEPHALA TANTILLA, n.sp.

♂. Bright metallic-green; sides and tips of elytra, tibiæ, and sometimes the tip of pygidium, coppery or coppery-red, antennæ (some joints obscurely diluted with red) and tarsi purplish-black. Clothed with short, stout, depressed, whitish setæ, becoming stramineous on prothorax and elytra.

Head with crowded, shallow punctures; clypeus strongly produced in front, the notch deep and almost rectangular, sides almost parallel. *Prothorax* lightly transverse; with crowded, shallow, reticulate, shagreened punctures; front angles rather acute; disc with a shallow, medio-basal, semi-double impression; lateral impressions deep and traceable almost to middle, the side close to each angulate. *Scutellum* flat and shagreened. *Elytra* very little wider than prothorax; with irregular rows of moderately large punctures; rather coarsely shagreened. Front *tibiæ* with subapical tooth rather feeble. Length (♂♀), 4½-5 mm.

♀. Differs in having the clypeus with a transverse carina dividing it into two almost equal portions, of which the front one is shining; the tips are also much smaller, and the tarsi are shorter.

Hab. - Queensland: Blackall Range (H. Hacker's No.701).—
New South Wales: Dorrigo (H. J. Carter).

In Blackburn's table, would be associated with *D. pygmæa*, from which it differs in its smaller size, sparser clothing, and feeble subapical tooth of front tibiæ; but regarding the subapical tooth as absent, it would be associated with *D. parvula*, from which it differs in its much smaller size, much smaller and

denser punctures, shagreened surface, &c. The doubling of the medio-basal depression of the pronotum is fairly distinct when viewed obliquely from behind, but rather indistinct from other directions. The tip of the pygidium is highly polished.

CACOCHROA MARGINICOLLIS, n.sp.

♂. Black, antennæ and palpi castaneous. Sterna and hind part of hind femora with dense, stramineous hair, all tibiæ with a fringe of similar hair, rest of legs with numerous stiff setæ, sides of abdomen moderately clothed towards base.

Head with fairly numerous, sharply defined, but not very large punctures between eyes, becoming crowded and rugose on clypeus; also with numerous minute punctures on the intervening spaces; clypeus with sides moderately dilated from base to near apex, and then rounded, with the apex feebly incurved to middle. Club about as wide as the head across eyes. *Prothorax* rather lightly transverse, sides not conspicuously bisinuate, base twice the width of apex, strongly trisinuate, median sinus slightly posterior to and narrower than the others; sides with punctures about the size of those on clypeus, but not so dense, becoming sparser and smaller towards and almost absent from middle of disc, in addition with numerous, minute punctures. *Scutellum* with very minute punctures, and a few larger ones (but still small) on sides. *Elytra* not much wider than prothorax; with irregular rows of shallow punctures, sides posteriorly and apical slope irregularly strigose; suture distinctly elevated from about the middle, the apex lightly mucronate. *Abdomen* gently flattened along middle; pygidium strongly concentrically strigose. Mesosternal process produced to between front coxæ, and rather obtusely pointed. Front *tibiæ* tridentate, the two smaller teeth rather obtuse, middle pair triangularly bidentate at apex and with two long spurs, hind pair tridentate at apex, but two of the teeth small and round, the spurs unequal, and slightly longer than on the middle pair. Length, 21-22 mm.

Hab. - Northern Queensland (Dr. E. W. Ferguson), Cape York (Macleay Museum).

With the general appearance of *Ablacopus ater*, and of large

specimens of *C. pullata*, but with prothorax more transverse, sides not conspicuously bisinuate, elytra less narrowed posteriorly, and with distinct striation, &c. Each side of the prothorax, instead of being conspicuously bisinuate as on most species of the subfamily, sweeps round in an even curve from the base to beyond the middle, and then obliquely to the apex, so that the sides (but not the base) more nearly approach those of the species of *Glycyphana*, than of its own allies. It has been referred to *Cacochroa*, with some doubt, but the mesosternal process is too long for it to be placed in *Diaphonia*, or a closely allied genus. The specimen in the Macleay Museum is obscurely diluted with red towards the elytral suture and towards the sides of the pronotum, but, to the naked eye, appears as dark as the type. The abdomen is not concave along the middle, and the flattening is such as occurs on some females in the subfamily; but, on dissection of the type, an œdeagus was found.

XYLOPHILIDÆ.

XYLOPHILUS MIROCERUS, n.sp. (Plate xxix., fig. 1).

♂. Piceous-brown; elytra flavous, with conspicuous brown markings and a vague pruinose gloss, antennæ and legs brownish-flavous or castaneous, tarsi paler. Upper surface sparsely pubescent, elytra almost glabrous.

Head with eyes large, deeply notched, and almost touching in front. Antennæ moderately long, inserted in ocular notches; second joint short, as wide as tip of first, third subquadrate, much wider than second, fourth to seventh about as wide as third but slightly decreasing in length, eighth and ninth distinctly smaller, tenth and eleventh distorted. *Prothorax* decidedly transverse, sides gently rounded; with fairly dense and sharply defined, but not very large punctures; with two distinct and lightly separated medio-basal impressions. *Elytra* about one-fourth wider than prothorax, sides almost parallel to beyond the middle; with fairly numerous punctures, sharply defined and of moderate size only about a feeble, subscutellar elevation. *Hind femora* inflated towards, and subangular near apex; hind-tibiae long, thin, and lightly bisinuate. Length, 2 mm.

Hab.—Queensland : Dalby (Mrs. F. H. Hobler). Unique.

On the type, the head is darker than the prothorax, and the latter has the base (and the apex more narrowly) somewhat flavous. The dark markings on the elytra are so disposed that the flavous parts are isolated as follows : a large patch on each shoulder, almost touching the suture, and on the side extending to the basal fourth (in some lights, a feebly infuscated line appears to divide each humeral spot into two); a large, trilobed, median patch, of which the median lobe is advanced along the suture to about the basal fourth; and a bisinuate fascia near the apex, but slightly interrupted by the suture; the three apical segments of the abdomen are paler than the others. The antennæ are very peculiar; the joints actually decrease in size from the fourth to the ninth; the tenth varies in appearance with the point of view; from one direction, it appears to be thinner than the ninth, and almost as long as the ninth and tenth combined; it is joined to the ninth near its base, which is produced to one side as a rather acute point; the eleventh is much wider than long, and very acute at its inner apex (in general appearance, the eleventh joint is curiously suggestive of a small, geological pick-head, or of the apical joint of a scorpion's tail); from some directions, however, the joints of the antennæ appear to be of even width from the third to the tip, with the tenth joint conspicuously longer than the eleventh, and the latter very similar to the ninth.

XILOPHILUS INTRICATUS, n.sp.

♂. Flavous; prothorax and elytra with conspicuous, dark brown markings; head, sterna, and part of abdomen blackish, antennæ reddish-flavous, but apical parts much darker, four hind-femora deeply infuscated towards base. Clothed with short, whitish pubescence, inconspicuous on prothorax and elytra, dense on head and undersurface.

Head with eyes large, deeply notched, and almost meeting at their nearest point. Antennæ moderately long, some of the joints curiously formed. *Prothorax* moderately transverse; punctures irregular and partially concealed; with a conspicuous, transverse impression on each side in front, and another (divided

into two by an elevated median line) near the base in the middle. *Elytra* much wider than prothorax; with dense, sharply defined, and moderately large-punctures on and about a subscutellar elevation on each elytron, but smaller and sparser elsewhere. *Legs* rather long and thin; hind-femora stout; hind-tibiæ not notched, and not dilated at apex. Length, $1\frac{3}{4}$ mm.

♀. Differs in having smaller eyes, not quite so close together in front (but still very close), antennæ shorter and otherwise different, abdomen more convex, and legs somewhat shorter.

Hab.—N.S.W.: National Park, near Sydney.—Tasm: Hobart and Swansea (A. M. Lea).

The markings on the prothorax consist of a transverse, median fascia, somewhat irregular on its posterior edge, and trilobed in front; on each elytron, the markings are rather narrow; the first is somewhat like an interrogation-mark (? but without the lower dot), touches the suture near the base, and terminates near the middle; the second commences near the suture, runs down it for a short distance, curves upwards and outwards, then outwards, and is then marginal to the base; the third is shorter than the second, and parallel to its median portion; between the two, the derm is paler than the marks, but darker than the general colour of the elytra, and the suture and tips are of a similar shade to, and connected with, the part between the second and third marks. On the male, the markings are more sharply defined than on the female, but exactly the same in pattern. The pubescence is so dense and short on the head and under-surface, that, at first glance, these parts have a somewhat mouldy appearance. The ocular notches are so large, that each eye appears to be almost divided into two. The antennæ of the male are very remarkable; the first joint is stouter and larger than usual in the genus, the second is short and transverse; the third is slightly more than the combined length of the fourth and fifth (these being simple); the sixth is dilated on one side, and quadrangular; the seventh and eighth are rather short, but each has an acute process on one side; the ninth is thin and curved; the tenth is large, very irregular in shape, its extreme length about equal to that of the four preceding joints combined,

curved and inwardly concave; the eleventh is of very curious shape, and very narrowly joined to the tenth. On the type, the three apical joints of each antenna are closely applied to each other, the eleventh being apparently received into a groove in the tenth, and the latter is folded back on the ninth; but a specimen from Gosford (in Coll. H. W. Cox) has the three apical joints separated, when it may be seen that the ninth is very thin, the tenth irregularly convex on one side, and irregularly concave on the other, with the tip acutely produced for a short distance; the eleventh is joined to the tenth near its base (so that the mass of the tenth joint appears to be forced to one side), strongly and suddenly curved at its middle, and with a small spine on one side; so that probably these two joints form a clasping organ, as in the equally remarkable antennæ of *X. malleifer*: the tenth joint is much larger than the eleventh, but, from some directions, it appears to be actually smaller. On the female, the second joint is stouter and shorter than the third; the third is distinctly longer than the fourth; the seventh to tenth are strongly transverse, and gradually dilated to form a club with the eleventh, this being briefly ovate, and about as long as the ninth and tenth combined. The head, as viewed from in front, appears to have four eyes, the two median ones of which are closer together than the two on each side, their outlines being rendered more conspicuous by the dense pubescence covering all the adjacent surface.

XYLOPHILUS PENTAPHYLLUS, n.sp.

♂. Of a dingy, testaceous-brown, parts of appendages somewhat paler; head blackish. Clothed with short, ashen pubescence, denser on undersurface than on upper.

Head with small and rather dense punctures. Eyes prominent and widely separated, lightly notched in front. Antennæ with first joint stout and moderately long, second short and transverse, third rather long, fourth partly concealed by third, fifth small and partially concealed by fourth, sixth to tenth very short but each with a long ramus, eleventh almost as long as ramus of tenth, rather thin at base but dilated towards apex. *Prothorax*

moderately transverse, sides wider near apex than elsewhere; with numerous, fairly strong punctures; with a fairly large fovea on each side of middle of base; a shallow, longitudinal impression, and a shallow, transverse one slightly in advance of the middle. *Elytra* much wider than prothorax, sides gently dilated to beyond the middle; with dense and sharply defined, but not very large punctures, rather larger on and about some feeble basal swellings than elsewhere. *Legs* rather long; hind-tibiae thin and parallel-sided except at extreme base. Length, 2 mm.

Hab.—Tasm.: Mount Wellington (A. M. Lea).

The two males before me (one of which belongs to Mr. H. H. D. Griffith) at first glance appear like small, dingy specimens of *X. pectinicornis*, but may be at once distinguished by the eyes. Champion says of the eyes of that species, "very large, narrowly separated in front"; and a specimen before me, that agrees well with his description and figure, has the eyes so close together that, at first glance, they appear to be touching, and the distance separating them is only about the width of a facet, certainly distinctly less than the *thickness* of the basal joint of an antenna. On the present species, the eyes, although large, are much smaller than on that species, and even more apart than those of its female, the distance between them at their nearest being about equal to the diameter of an eye, and quite as much as the *length* of the basal joint of an antenna; there are also slight differences in the sculpture elsewhere.

XYLOPHILUS SPINIPES, n.sp.

♂. Black; prothorax, shoulders, palpi, four front legs, and hind-tarsi reddish. Moderately clothed with ashen or whitish pubescence.

Head with small but fairly dense punctures. Eyes large, close together, and subtriangularly notched. Antennæ moderately long and not very thin, second joint small, third to tenth each almost as long as wide, eleventh slightly longer than ninth and tenth combined. *Prothorax* rather small, almost parallel-sided from base to near apex; with a shallow and irregular median line, and a small depression on each side of base; punctures

sharply defined, and very little larger than on head. *Elytra* much wider than prothorax, parallel-sided from shoulders to near apex, with a feeble swelling on each near scutellum; punctures dense, sharply defined and of moderate size near base, becoming much smaller posteriorly. *Legs* rather long; front trochanters acutely spined; hind-femora stout; front tibiae bisinuate on lower surface, and dentate at tip; hind pair not much thicker than middle ones. Length, $2\frac{3}{4}$ mm.

Hab. — N.S.W.: Wollongong (A. M. Lea). Unique.

Structurally close to *X. abnormis*, but elytra entirely dark, except for a spot about the size of an eye on each shoulder. The distance between the eyes at their nearest point is about equal to the thickness of the basal antennal joint. The basal joint of the hind-tarsi is rather more strongly curved than usual; the armature of the front trochanters is much as in many *Pselaphide*.

XYLOPHILUS OPACICOLLIS, n.sp.

Black; prothorax, palpi, four front legs, and hind-knees flavous, head of a dingy flavous with the base infuscated, three basal joints of antennae obscurely testaceous, the others darker. Rather densely clothed with very short, pale pubescence.

Head moderately convex; with dense, partially concealed punctures. Eyes large, lightly notched in front, separated for about the length of two basal joints of antennae. Antennae moderately long, second joint short and subglobular, third thinnest of all and slightly longer than first, fourth to tenth very feebly decreasing in length, and very feebly increasing in width, eleventh distinctly wider than tenth, and almost as long as ninth and tenth combined. Apical joint of palpi very large and strongly securiform. *Prothorax* about as long as wide, moderately convex, nowhere shining, sides very feebly dilated from base to near apex, with a vague depression on each side of middle of base, and a still more feeble one on each side, with vague remnants of a median, transverse impression and a median line; punctures much as on head. *Elytra* long, thin, and parallel-sided to near apex, basal swellings extremely feeble; with dense and sharply defined punctures of moderate size about base,

becoming very small posteriorly. *Legs* rather long and thin; hind-tibiæ no wider at apex than at apical third, and not notched; hind-tarsi with basal joint distinctly curved, and much longer than the rest combined. Length, 4 mm.

Hab.—N.S.W.: Jenolan (J. C. Wiburd). Unique.

An unusually elongate species, which I was at first disposed to consider as not belonging to the genus; but the metasternum and abdomen, although longer than usual, are not otherwise aberrant. The type is probably a male.

XYLOPHILUS LONGICORPUS, n.sp.

♂. Blackish, prothorax, palpi, and legs (hind-tibiæ slightly infuscated at apex) flavous. Closely covered with very short, pale pubescence.

Head rather convex; with dense and rather small, partially concealed punctures. Eyes large, prominent, lightly notched, separated for slightly more than the length of the two basal joints of antennæ. Apical joint of palpi large, and strongly securiform. *Prothorax* slightly longer than the basal width, sides lightly dilated to near apex and then rounded, with a rather shallow, semidouble, medio-basal impression, and a feeble depression on each side, with a fairly distinct but shallow, transverse impression slightly nearer apex than base; punctures somewhat as on head. *Elytra* long and thin, much wider than prothorax; basal swellings and punctures much as on preceding species. *Legs* moderately long and rather thin; hind-tibiæ conspicuously dilated to, and strongly notched at apex; hind-tarsi with basal joint moderately curved, and more than twice as long as the rest combined. Length, $3\frac{1}{2}$ mm.

Hab.—N.S.W.: National Park, near Sydney (A. M. Lea). Unique.

An unusually long, thin species, in general appearance closely allied to the preceding one, but readily distinguished by the hind-tibiæ; in addition, there are many slight differences in the prothorax and legs. The first joint of the antennæ is of the usual size, the second is short and subglobular, [the others are

missing];* but the species has been described on account of its close resemblance to the preceding one, from which it is strikingly distinct by the hind-tibiæ. The colours of both species are somewhat as in *X. eucalypti* and *X. flavicollis*, but otherwise they have little in common with those species.

XYLOPHILUS MICRODERES, n sp.

♀. Bright castaneo-flavous, head deeply infuscated. Moderately densely clothed with (for the genus) not very short, stramineous pubescence.

Head with rather dense and sharply defined, but not very large, punctures. Eyes prominent, separated for about the length of the two basal joints of antennæ, lightly notched in front. Antennæ moderately long, second joint slightly stouter and slightly shorter than third, eleventh slightly wider than tenth, and almost as long as ninth and tenth combined. *Prothorax* small, strongly transverse; with a vaguely impressed, median line, a feeble depression on each side of base; with dense and sharply defined punctures. *Elytra* comparatively large, much wider than prothorax, parallel-sided to near apex, with a feeble impression on each side at base; punctures dense, sharply defined and moderately large about base, becoming smaller posteriorly. *Legs* rather long and thin; hind-tibiæ no wider at apex than in middle. Length, $2\frac{1}{2}$ mm.

Hab.—Tasm.: Huon River (A. M. Lea). Unique.

A pale species, with infuscate head and conspicuous punctures. From *X. flavescens*, it differs in being larger, prothorax considerably smaller in proportion to the elytra, eyes larger and closer together than in the female of that species, and hindlegs very different from its male. The hind-tibiæ (not dilated, and not notched at the apex) are different from those of *X. divisus*, and several other pale species.

XYLOPHILUS IMPRESSICEPS, n.sp.

Black, parts of appendages reddish. Moderately densely clothed with fairly long, stramineous pubescence.

* The species, however, belongs to a group without strikingly distinctive antennæ.

Head with numerous, small punctures; with a shallow but fairly distinct, median line. Eyes prominent, lightly notched, separated for about the length of the basal, antennal joint. Antennæ moderately long and not very thin, second joint slightly shorter than third, eleventh distinctly wider than tenth, and almost as long as ninth and tenth combined. *Prothorax* rather small, moderately transverse; with dense but somewhat irregular punctures; with a distinct, medio-basal impression (evidently the remnant of a median line) and a transverse one on each side near base, and with remnants of a very feeble one across middle. *Elytra* much wider than prothorax, parallel-sided to near apex, with a moderate swelling close to scutellum on each side of base; and a shallow depression commencing between each swelling and the shoulder, and ending behind the swelling; with dense and sharply defined punctures of moderate size, but becoming small posteriorly. *Legs* rather long and thin; hind-tibiæ no wider at apex than in middle. Length, $2\frac{1}{4}$ mm.

Hab.—Tasm.: Mole Creek (A. M. Lea).

The type appears to be a female, and, in general appearance, is close to *X. immaculatus*; but the antennæ are darker, prothorax with three basal impressions, and head with a distinct, median line towards base. The elytra are uniformly blackish, but not of quite so deep a black as the head and prothorax; the appendages are more or less piceous-brown, with the tarsi paler.

XYLOPHILUS VARIICORNIS, n.sp.

♂. Piceous-brown, appendages paler, head and undersurface black or blackish. Closely covered with very short, ashen pubescence.

Head rather strongly transverse, with small but fairly distinct punctures. Eyes large, prominent, lightly notched, distance between them at their closest about equal to the length of the two basal joints of antennæ. Antennæ rather long and thin, second joint small and subglobular, none of the others transverse, eleventh not much wider or longer than tenth. *Prothorax* small and lightly transverse; with dense and rather distinct punctures; with a transverse depression (dilated on each side) across middle,

and four depressions at base. *Elytra* much wider than prothorax, very feebly dilated to beyond the middle, with a feeble swelling on each side of scutellum, and a shallow depression at the side of, and behind, each swelling; with dense and sharply defined, but not very large punctures on basal half, becoming smaller posteriorly. *Legs* rather long and thin: hind-tibiæ no wider at apex than in middle. Length, $1\frac{3}{4}$ - $2\frac{1}{4}$ mm.

♀. Differs in having the eyes smaller and less close together; antennæ much shorter, with several of the joints transverse; abdomen more convex, and legs somewhat shorter.

Hab.—Tasm.: Waratah, Swansea, Frankford, Hobart, Mount Wellington, Huon River (A. M. Lea).

In general appearance, close to *X. acaciae*, but antennæ of male conspicuously longer, punctures distinctly coarser, and upper surface without apparent "bloom," owing to the pubescence being somewhat longer, although still very short. At first glance, the antennæ of the male resemble those of the male of *X. conspici-latus*, but all the joints are distinct. The antennæ are considerably longer than in *X. inconspicuus*; they are usually infuscated from near the base, but sometimes are entirely pale; occasionally parts of the femora are lightly infuscated. One specimen has the prothorax quite as black as the head, and the elytra almost as black. The specimen (♂) from Waratah has the antennæ rather longer than usual, and entirely infuscated; the femora deeply, and the tibiæ lightly, infuscated; and almost the whole of the body-parts deep black. It certainly "looks" as if it belonged to a different species, and to a thinner and longer male from Frankford; but the differences appear to be varietal only from the normal form.

Two males from Western Australia (Donnybrook and Karridale) are paler than the Tasmanian specimens, with thinner and longer antennæ and legs, and more conspicuous, elytral punctures; they appear to represent a variety only.

XYLOPHILUS MICROMELAS, n.sp.

♂. Black, parts of undersurface and of appendages obscurely paler. With rather sparse and minute, ashen pubescence.

Head with dense and small punctures. Eyes prominent, widely separated, moderately notched and (for the genus) decidedly small. Antennæ moderately long, second joint subglobular, decidedly shorter and stouter than third, none of the others transverse, eleventh slightly longer and wider than tenth. *Prothorax* rather small, distinctly transverse, sides gently rounded; punctures dense and rather sharply defined; with three feeble impressions across middle, and four at base, the two median ones of the latter more conspicuous than the others. *Elytra* much wider than prothorax, parallel-sided to near apex, with two, feeble, sub-basal impressions; with dense and sharply defined punctures of moderate size, becoming smaller (but quite distinct) posteriorly. *Legs* rather long and thin. Length, $1\frac{1}{4}$ mm.

♀. Differs in being rather more robust, eyes smaller and more distant, antennæ shorter, second joint larger and some of the others lightly transverse, abdomen more convex, and legs slightly shorter.

Hab.—Tasm.: Huon River, Mole Creek (A. M. Lea).

A short, dumpy species, with blackish antennæ, rather close to *X. 4-foveatus*, but slightly smaller, antennæ and legs darker, prothoracic impressions not quite the same at the base, and with an additional (but feeble) one in middle of the disc. At first glance, the whole of the appendages appear to be blackish; but, on close examination, the coxæ, and parts of the tibiæ and tarsi are seen to be obscurely testaceous. In the type-female, the subscutellar elevations are feeble, but traceable; but they are practically absent from the male.

XILOPHILUS BIMACULIVENTRIS, n.sp.

Of a dingy piceous-brown; head almost black, elytra, muzzle, antennæ, palpi and legs of a more or less dingy brownish-testaceous; a fairly large, oblique, elliptic, flavous spot on each side of base of abdomen. With very short, ashen pubescence.

Head with minute punctures. Eyes prominent, widely separated, moderately notched in front, and (for the genus) rather small. Antennæ rather long and thin, second joint subglobular, slightly shorter than third, none transverse, eleventh wider than

tenth, but shorter than ninth and tenth combined. *Prothorax* rather small and slightly transverse, with a shallow, twice interrupted impression across middle, and with four impressions at base, of which the two median ones are oblique, larger and more distinct than the others, and almost touch. *Elytra* comparatively large, much wider than prothorax, sides feebly dilated to beyond the middle, with a feeble swelling on each side of scutellum, and a depression behind each swelling; with dense and sharply defined punctures on basal half, becoming very small posteriorly. *Legs* long and thin; hind-tibiæ thin throughout. Length, $1\frac{1}{4}$ - $1\frac{1}{2}$ mm.

Hab.—N.S.W.: Jenolan (J. C. Wiburd), Wollongong (A. M. Lea).

Readily distinguished from all the other, small, dingy species of the genus, by the two, conspicuous, abdominal patches; although these are probably sexual (and masculine), they are slightly elevated, and have denser clothing than elsewhere. The elytra are distinctly paler than the prothorax, and the latter is somewhat paler than the head; the basal joints of the antennæ are somewhat paler than the others. On one specimen, each segment of the abdomen is flattened in the middle; on another, they are similarly flattened, but the apical segment has a conspicuous depression on each side of the middle; probably, however, the flattening was due to the specimens being mounted when the abdomen was in a soft condition.

XYLOPHILUS CONVEXICEPS, n.sp.

♂. Blackish; palpi, tarsi, and coxæ obscurely paler. Moderately clothed with very short, depressed, ashen pubescence; the elytra, in addition, with a few, fine, upright hairs.

Head of moderate size and rather strongly convex, narrowed behind eyes and at base, with a distinct (but normally concealed) neck, median line vaguely traceable, semicircularly depressed in front; with dense and sharply defined, but rather small punctures. Eyes rather small, lateral, very prominent, entire, rather distant from base. Antennæ long and thin, each inserted in front of a slight ridge placed obliquely inwards from the eye,

first joint not very long, its apical portion subglobular, second small and subglobular, third slightly longer than first or fourth, feebly dilated to apex, fourth to tenth subequal in length, each lightly and regularly dilated to apex, eleventh slightly longer than tenth, its tip moderately acute. Apical joint of palpi securiform. *Prothorax* rather small, about as long as wide, distinctly narrower than head; with a conspicuous, semidouble, medio-basal impression, and a smaller but distinct one on each side of base, a distinct impression across middle at apical third, but rather shallow in middle, and with a vague, median line; with dense punctures, slightly larger than on head. *Scutellum* minute. *Elytra* lightly convex, distinctly wider than prothorax, almost parallel-sided to near apex, with a vague swelling on each side of scutellum: punctures crowded, sharply defined, and slightly larger than on prothorax, becoming smaller (but still distinct) posteriorly. *Sterna* with crowded and moderately large punctures; metasternum elongate, with a distinct, medio-apical fovea. *Abdomen* large, all sutures distinct; with dense, sharply defined punctures, rather smaller than on sterna; second and fifth segments slightly larger than each of the others. *Legs* rather long and thin; front coxæ touching, middle pair lightly, the hind ones moderately separated, hind-femora moderately stout, hindmargin with a conspicuous patch or fringe of pale pubescence, shorter near base than in middle, so as to cause a notched appearance. Length, $2\frac{1}{4}$ - $2\frac{1}{2}$ mm.

Hab.—Tasm.: Hobart (A. M. Lea).

The suture between the two basal segments of abdomen is quite distinct across the middle; the margins of the prothorax are not keeled, and the prosternal sutures are rather distinct; the clothing of the hind-femora is remarkable, but there are many Xylophili with curious, femoral clothing. Under a compound power, the hind-tibiæ appear to be terminated by two small spines (invisible under a Coddington lens), and the hind-tarsi to have the basal joint as long as the rest combined, the second short, the third produced as a lobe under the base of the fourth, and each claw to have an obtuse swelling at its base,

I am satisfied that all the preceding species belong to *Xylophilus*, or to some of the many subgenera proposed at its expense; but so many, apparently strikingly distinct forms have been separated from that genus, and later on reunited with it, that it seems desirable not to propose any new genus on species that could, by any reasonable probability, be referred to it. It is probable that the present, and some of the following species, may be considered worthy of generic rank, but, for the present, they are referred to the main genus. Whether this and the next species are allowed to remain in *Xylophilus* or not, however, they should always be generically associated.

XYLOPHILUS SUBSERRATICORNIS, n.sp.

♂. Black, prothorax flavous, parts of legs obscurely flavous. Moderately clothed with short, depressed, ashen pubescence; elytra, in addition, with a few, fine, upright hairs.

Head and appendages as in preceding species, except that the median line is still more feebly impressed, that the punctures are slightly more distinct, and that the antennæ have a slightly more serrated appearance. *Prothorax* slightly transverse, and distinctly narrower than head, base and apex equal, sides gently rounded, with an impression across middle at apical third, rather shallow on disc but fairly deep on sides, with a conspicuous, curved, medio-basal impression, and a small, round fovea on each side; punctures much as on head. *Scutellum* minute, within a shallow depression. *Elytra* rather long, much wider than prothorax, almost parallel-sided to near apex, with a vague swelling on each side of scutellum: punctures dense, sharply defined and of moderate size, becoming smaller posteriorly. *Sterna* and *abdomen* much as in preceding species. *Hind-femora* each with a conspicuous pad of pale pubescence on hind-margin from base to near apex. Length, $2\frac{1}{2}$ mm.

Hab.—N.S.W.: Jenolan (J. C. Wiburd). Unique.

Structurally close to the preceding species, but with flavous prothorax, and clothing of hind-femora somewhat different. The eleventh joint of both antennæ, and the middle legs are missing from the type.

XYLOPHILUS INFLATIPENNIS, n.sp.

Of a dingy piceous-brown, head and prothorax almost black. Moderately clothed with very short, ashen pubescence.

Head transverse, rather convex, shining; with some distinct punctures between eyes but sparse elsewhere; muzzle short. Eyes rather large, lateral, prominent, coarsely faceted, scarcely notched, rather distant. Antennæ long and thin, second joint small and subglobular, third to tenth equal and cylindrical, eleventh slightly longer and wider than tenth. Apical joint of palpi securiform. *Prothorax* rather small, slightly wider than long, base considerably wider than apex, with a conspicuous, oblique, slightly curved impression, commencing near middle of base, and ending on each side near apex, a shallow median line on apical two-thirds; punctures dense and somewhat irregular, but usually sharply defined. *Scutellum* small. *Elytra* flat, much wider than prothorax, considerably dilated to near apex, and then widely rounded, with an extremely feeble swelling on each side of scutellum; punctures dense, sharply defined, and of moderate size near base, becoming smaller posteriorly. *Metasternum* shining, with distinct punctures at base and sides, and with a conspicuous, medio-apical impression. *Abdomen* with second segment slightly longer than first, the suture between them distinct across middle. *Legs* long and thin; front coxæ touching, the others lightly separated; penultimate joint of tarsi produced below claw-joint. Length, $2\frac{1}{4}$ - $2\frac{1}{2}$ mm.

Hab.—Tasm.: Mount Wellington, Ulverstone (A. M. Lea).

In general appearance, like a minute *Trichosalpingus*. The oblique impression on each side of the pronotum is considerably deeper in front than where the two join near the base (although very conspicuous there); as a result, the apical portion appears to be rather strongly convex in the middle, and much deeper than the basal portion. In the male, the antennæ distinctly pass the metasternum; in the female, they scarcely extend so far, and the joints (especially after the fifth) are less cylindrical.

The dilated elytra, and suture between the two basal segments

of abdomen distinct across the middle, are aberrant features; the sculpture of the prothorax is also peculiar. If it should eventually be considered necessary to refer it to a new genus, the next species should probably also be associated with it.

XYLOPHILUS VILLOSICORNIS, n.sp.

♂. Of a dingy piceous-brown, appendages somewhat paler. Clothed with short, ashen pubescence, but the antennæ with numerous, rather long hairs.

Head transverse, shining, rather convex; with distinct punctures; muzzle short. *Eyes* moderately large, lateral, prominent, coarsely faceted, lightly notched, rather distant. *Antennæ* decidedly long and thin, second joint small and subglobular, third to tenth cylindrical, third slightly longer than fourth, fourth to tenth subequal, eleventh distinctly longer than tenth and slightly wider. Apical joint of palpi strongly securiform. *Prothorax*: rather small, lightly transverse, with a conspicuous, curved, medio-basal, semidouble impression, and a small impression near it on each side; a strong, transverse impression on each side near apex, but not traceable to middle, with a very vague, median line on apical half; punctures small, and moderately dense. *Scutellum* small. *Elytra* long and feebly convex, much wider than prothorax, basal third parallel-sided, and then very feebly dilated to near apex, with a very vague swelling on each side near scutellum; punctures dense and sharply defined, but not very large near base, becoming smaller posteriorly. *Metasternum* rather elongate; with numerous, sharply defined punctures; a distinct, medio-apical impression. *Abdomen* with second segment slightly larger than first, the suture between them distinct across middle, third and fourth segments small. *Legs* long and thin, their coxæ and tarsi as in the preceding species. Length, $1\frac{3}{4}$ mm.

Hab.—Tasm.: Mount Wellington (A. M. Lea). Unique.

With the general appearance of some of the thinner specimens of *X. tenuicornis*, but prothoracic impressions, antennæ, and abdomen different. The head and abdomen are rather darker than the other parts.

XYLOPHILOSTENUS, n.g.

Head of moderate size, with a distinct neck. Eyes large, transverse, coarsely faceted, deeply notched; rather close together in front. Antennæ of moderate length, some of the joints strongly ramose in male, simple in female. Palpi with apical joint strongly securiform. *Prothorax* strongly transverse, margins keeled. *Scutellum* small. *Elytra* long and almost parallel-sided, not much wider than prothorax. *Mesosternum* moderately long; episterna wedge-shaped; epimera briefly triangular. *Metasternum* elongate; episterna rather narrow, conspicuously narrowed posteriorly. *Abdomen* with all sutures distinct, first segment shorter than second along middle, but longer at sides; second slightly longer than third or fourth, the latter slightly longer than fifth. *Legs* rather long and thin; front coxæ touching, coxal cavities widely open behind, middle coxæ separated in front, but touching behind; hind-coxæ almost touching; femora unarmed; tibiæ lightly spurred, hind pair slightly dilated to and feebly notched at apex; tarsi with penultimate joint produced as a lobe under base of claw-joint, claws small and apparently simple.

The typical species is a narrow, depressed insect, in general appearance strikingly close to many species of *Heteromastix* of the *Malacodermidae*; it differs from *Xylophilus* in its decidedly more elongate form, and distinct suture between the first and second abdominal segments. The wings are large and blackish.

XYLOPHILOSTENUS OCTOPHYLLUS, n.sp. (Plate xxix., fig.2).

♂. Black or blackish, prothorax flavous; legs and palpi of a more or less dingy flavous or testaceous, the hindlegs sometimes piceous. Moderately clothed with whitish or ashen, suberect pubescence, on the prothorax with a somewhat golden tone; undersurface and legs with shorter, depressed pubescence.

Head with minute and not very dense punctures; with a shining, oblique ridge near each eye, the space between the ridges subtriangular, depressed, and with more conspicuous punctures than elsewhere. Eyes some distance from the base, at their

closest separated from each other for about the length of second joint of antennæ. Antennæ inserted in front of the ocular notches, first joint moderately long, dilated to apex, second small, third almost as long as first but rather less dilated to apex, fourth to tenth very short but each with a long and thin ramus, eleventh long, thin, and resembling the ramus of the preceding joint. *Prothorax*: about twice as wide as long, base truncate, sides gently rounded; with small and fairly dense punctures; with a rather small and deep fovea on each side of base, and a wider and shallow depression between them. *Elytra* more than thrice as long as head and prothorax combined; with dense, sharply defined punctures of moderate size, becoming rather small posteriorly, but nowhere lineate in arrangement. Front *tarsi* not very long, first joint slightly shorter than fourth; hind-tarsi with first joint lightly curved and longer than the rest combined. Length, $3\frac{3}{4}$ -4 mm.

♀. Differs in having the eyes not quite so close together, antennæ longer and without rami, fourth joint slightly longer than third, the others very feebly decreasing in length, elytra slightly wider posteriorly, abdomen more convex, and legs somewhat shorter.

Hab.—Tasm.: Mole Creek, Ulverstone, Burnie, Hobart (A. M. Lea).

The antennal rami appear to be of a very fragile nature, as most of them are damaged on the two males before me; each of them is about as long as the elytra are wide, and slightly knobbed at the tip.

RHIPIDOPHORIDÆ.

PELECOTOMOIDES SUBPARALLELA, n.sp.

Black, claws and tibial spurs reddish. Densely clothed with short, ashen pubescence.

Antennæ rather stout, third joint almost as long as fourth and fifth combined, fifth slightly longer and distinctly wider than fourth, sixth to tenth strongly serrated, eleventh notched on each side near apex. *Prothorax* with sides strongly rounded, apex

not half the width of base, with three feeble depressions in a transverse series across middle. *Elytra* a trifle wider than prothorax; almost parallel-sided to beyond the middle, each with a shallow, longitudinal depression, and with traces of feeble costæ. Length, 12-16 mm.

Hab.—N.S.W.: Jenolan (J. C. Wiburd), Mount Kosciusko (R. Helms).

A rather large, dingy species (although much smaller than *P. conicollis*), that might be referred to Gerstäcker's first section of the genus. The elytra are much less narrowed posteriorly than any of the species named by Macleay. The specimens from Mount Kosciusko have the elytra and tarsi of a dingy brown, the abdomen and antennæ somewhat darker; on the type, part of the elytra and scutellum are obscurely brownish, but on a second specimen, from Jenolan, these parts (except as to their clothing) are entirely black.

CEDEMERIDÆ.

PSEUDOLYCUS TARSALIS, n.sp. (Plate xxix., fig.3).

♀. Black, opaque, elytra of a brick-red. Densely clothed with short pubescence, similar in colour to the derm on which it rests.

Head strongly convex between eyes. Antennæ with third to sixth joints flat, strongly inflated and subtriangular, seventh also flat and inflated, but lop-sided, eighth to eleventh much thinner and cylindrical, eleventh semi-double. *Prothorax* strongly transverse, widest close to apex, angles evenly rounded off, with a vague, median depression somewhat deeper at base and apex, and with a large, irregular excavation towards each side of disc. *Elytra* much wider than prothorax, slightly dilated posteriorly; each with four, conspicuous, subcostal elevations on disc, suture also elevated but not to base; surface densely and finely granulate but partially concealed by clothing. Basal joint of hind-tarsi with a conspicuous setæ-tipped projection at the outer base. Length, 12½ mm.

Hab.—Tasm.: Frankford (A. M. Lea). Unique.

In general appearance, strikingly close to var. *rufipennis* of *P. hæmorrhoidalis*, but at once distinguished by the hind-tarsi

(the remarkable sculpture may be sexual, but, as the type is a female, this is unlikely); the prothorax is also very much shorter, and without the conspicuous medio-basal impression bounded posteriorly by oblique ridges, being even shorter than in *P. wallacei*. The semi-doubling of the apical joint of the antennæ is so conspicuous, that that joint appears to be really two; and these regularly decrease in length, with the others, from the eighth. On the type, the elytra are not entirely red, as the suture, for a short distance, is black; and there is a slight infuscation on the disc of each at about the basal fourth; the latero-basal margins (concealed from above) are also black; the legs (except for the claws and tibial spines) and antennæ are entirely black.

PSEUDOLYCUS BIVITTICOLLIS, n.sp.

♀. Black, opaque; elytra and two prothoracic vittæ of a bright brick-red; antennæ with most of the eighth and ninth joints, and the bases of the tenth and eleventh, obscurely red. Densely clothed with pubescence, similar in colour to the derm on which it rests.

Head strongly convex between eyes. Antennæ with third to seventh joints wide, flat, and subtriangularly dilated to near apex, eighth to eleventh much narrower and cylindrical, eleventh conspicuously semi-double. *Prothorax* widest near apex, where the width is slightly more than the length, but base less than the length; with a shallow, median line from apex to base, and somewhat dilated posteriorly; a shallow depression on each side in front. *Elytra* much wider than prothorax; each with four, conspicuous, costal elevations on disc; surface finely granulate. Length, 14 mm.

Hab.—N.S.W.: Galston (D. Dumbrell).

In general appearance (except for the prothoracic vittæ) much like the var. *rufipennis* of *P. hæmorrhoidalis*, and with antennæ of very similar shape (but not colour); but differs in having the depressed median line of the prothorax commencing almost at the extreme apex, and gradually dilating to the base, so that there is not a medio-basal triangle. The eighth joint of antennæ

is almost entirely of a dingy flavo-testaceous, the ninth and tenth partly so, the eleventh is distinctly semi-double, the apical portion being conspicuously shorter and narrower than the basal portion. The prothoracic vittæ are almost parallel-sided, and parallel to each other, in which they differ from the form of *P. hæmopterus* having the pronotum bivittate; but the females of both species may be distinguished by the seventh and eighth joints of antennæ; in the present species, their proportions being as in *P. hæmorrhoidalis*, although, in colour, the apical joints approach those of *P. hæmopterus*. A specimen from Beechworth (Victoria; in Coll. Carter), has the prothoracic vittæ considerably reduced in size, so that they do not quite touch the base, and terminate about the middle.

Table of the Species of *Pseudolycus*.

- A. Antennæ conspicuously eleven-jointed.
- a.* Sutural costa near base curving round to join first discal costa *wallacei*.
- aa.* Sutural costa not joined to first discal costa.
- b.* Median vitta of prothorax continuous throughout *carteri*.
- bb.* Median vitta terminated before apex *ritticollis*.
- AA. Antennæ with apical joint semidouble, causing them to appear almost or quite twelve-jointed.
- B. Pronotum polished and glabrous..... *hilaris*.
- BB. Pronotum densely clothed (at any rate in parts).
- C. Basal joint of hind-tarsi not simple... *tarsalis*.
- CC. Basal joint simple.
- D. Prothorax having two ridges, which diverge obliquely hindward from the middle of the median line, enclosing a triangular depression.
- c.* Eighth joint of antennæ quite as flat as, and more than half the width of seventh *uiger*.
- cc.* Eighth joint subcylindrical, and less than half the width of seventh *hæmorrhoidalis*.
- DD. Prothorax not as in D.
- E. Pronotum red along middle *torridus*.
- EE. Pronotum black (or, if partly red, then black along middle).
- F. Eighth joint of antennæ of female much less than half the width of seventh *biritticollis*.
- FF. Eighth joint of female more than half the width of seventh *hæmopterus*.

Notes on Table.

c. P. niger is placed here with hesitation, as the medio-basal depression is less triangular than in *P. hæmorrhoidalis*, and the posterior bounding lines are more obtuse and less straight.

P. canaliculatus was not included in the table, owing to the broken antennæ of the type; but it would probably be associated with *P. hilaris*.

DOHRNIA UNDULATICOLLIS, n.sp.

♂. Black, front of head (except labrum) and its undersurface except behind eyes), prothorax, most of legs, and parts of antennæ and palpi flavous. Densely clothed with pale, depressed pubescence; less conspicuous on head and prothorax than elsewhere.

Head gently convex towards base, and obliquely flattened in front; with dense and small, but rather sharply defined punctures. Eyes large, prominent, and entire. Antennæ rather long and thin, eleventh joint slightly longer than tenth, and feebly semi-double. *Prothorax* distinctly transverse, sides moderately dilated towards apex, apex gently rounded, base bilobed and narrowly upturned; with a wide, transverse depression near apex, a smaller medio-basal depression, and a shallow impression on each side about the middle; with very small punctures. *Elytra* much wider than prothorax, parallel-sided to near apex; each with two, feeble, discal costæ; punctures crowded and small, but sharply defined. Tip of *abdomen* triangularly notched. *Legs* rather long and thin; claws each with a small but distinct basal swelling. Length (♂♀), 6-7½ mm.

♀. Differs in being somewhat wider, eyes rather less prominent, antennæ and legs a little shorter, and abdomen not notched.

Hab.—N.S.W.: Blackheath (G. Masters), Jenolan (J. C. Wiburd), National Park (A. M. Lea).—Victoria (H. J. Carter).

In general appearance very close to *D. bifoveicollis*, and with the labrum quite as conspicuously black, but the prothorax with a transverse impression covering the whole of the space near the apex, instead of with two, large, disconnected excavations. The eight apical joints of the antennæ are narrowly flavous at base,

but the three other joints have most of their underparts pale; the tips of the palpi are infuscated; the tarsi are mostly black or infuscated, the front tibiæ infuscated about apex, the middle ones have the infuscation more extended, and the hind ones still more so; on two specimens, the hind-femora are stained with black about the middle; on several specimens, the head has a vague, brassy gloss; the scutellum is black, except that, on one specimen, its tip is obscurely diluted with red.

Table of the Species of *Dohrnia*.

Antennæ of male with some joints distorted	<i>miranda</i> .
Antennæ of male with no joints distorted.	
Pronotum with two, large, disconnected, subapical excavations	<i>biforeicollis</i> .
Pronotum without such excavations.	
Middle femora entirely black or blackish	<i>boisdurati</i> .
Middle femora about half pale and half black	<i>eremita</i> .
Middle femora entirely pale	<i>undulaticollis</i> .

COPIDITA INCISA, n.sp. (Plate xxix., fig.4).

♂. Flavous and black, elytra dark metallic blue (or green). Rather densely clothed (more sparsely on the prothorax than elsewhere) with subdepressed, ashen or sooty pubescence.

Head rather strongly convex; with dense and sharply defined punctures, becoming crowded near base; mandibles bifid. Eyes large, prominent, and rather lightly notched. Antennæ long and thin, eleventh joint slightly longer than tenth, and feebly semi-double. Maxillary palpi with the outer joint large, and strongly notched on the outer side. *Prothorax* slightly longer than wide, sides dilated to near apex, apex gently incurved at middle, base narrowly upturned; with three, vague depressions; punctures fairly dense and large about base and sides, but rather shallow, becoming smaller elsewhere. *Elytra* much wider than prothorax, with remnants of feeble, discal costæ; with crowded and rather coarse punctures, in places becoming granulate-punctate. Length (♂♀), 6½-7 mm.

♀. Differs in being somewhat wider, prothorax lightly trans-

verse, apical joint of palpi longer and not notched, in the tip of the abdomen, and the claws.

Hab.—N.S.W.: Mount Victoria (A. M. Lea).

In general appearance, fairly close to *C. apicalis*, but readily distinguished by the palpi of the male. In some respects, the specimens agree with the description of *C. pulchra*, but the apical joint of the maxillary palpi is fully twice the length of the penultimate (instead of scarcely longer) in both sexes, and in the male is very distinctive. The male certainly has bifid claws; in the female, each claw, from some directions, is seen to have a conspicuous, basal swelling, rather acutely pointed, but the claws are not bifid. The flavous parts are the clypeus and middle of undersurface of head, prothorax, scutellum, mesosternum, metasternum, basal half of femora, and the coxæ.

COPIDITA PACHYMERÆ, n.sp. (Plate xxix., fig.7).

♂. Flavous; head (except for parts of muzzle), antennæ, palpi, knees, tibiæ, and tarsi black or infuscated; elytra black, with a purplish gloss, and a conspicuous, median, flavous patch. Rather densely clothed (sparser on the prothorax than elsewhere) with subdepressed, ashen or sooty pubescence.

Head moderately convex; with dense and sharply defined, but not very large punctures, becoming crowded at base, and smaller in front; mandibles bifid. Eyes large, prominent, and feebly notched in front. Antennæ long and thin, eleventh joint no longer than tenth, and conspicuously semi-double. Apical joint of maxillary palpi long, and conspicuously incurved on outer side. *Prothorax* distinctly longer than wide, sides moderately dilated near apex, base narrowly upturned; with vague, discal depressions; and dense and fairly large, subasperate punctures, becoming smaller and shallower in front. *Elytra* much wider than base of prothorax; each with four discal costæ, moderately distinct in places; densely granulate-punctate. *Hind-femora* very stout; hind-tibiæ with a small, acute tooth one-third from the inner apex. Length, $7\frac{1}{2}$ -8 mm.

Hab.—N.S.W.: Sydney (H. J. Carter), Galston (D. Dumbrell).

In general appearance much like *C. sloanei*, but the male without a supplementary process to the palpi, hind-femora unusually stout (fully twice as thick as the others), and hind-tibiæ dentate. The abdomen appears to be composed of but four ventral segments, with the apical one large, lightly produced at the middle of its apex, and not concealing the complicated genitalia; the true first segment, however, is visible at the sides. The elytra have the suture narrowly pale, but, in the middle, there is a suddenly dilated, subquadrate patch, rather sharply defined, but with somewhat jagged edges.

Five females from Galston probably belong to this species; they have the hind-femora not, or scarcely, stouter than the others, and the hind-tibiæ simple; the dark parts of the appendages rather less deeply infuscated, and the median patch of the elytra is more regularly quadrate.

COPIDITA MEDIOFLAVA, n.sp. (Plate xxix., figs. 5, 6).

♂. Flavous and black or blackish, elytra black with a purplish gloss, the suture and a conspicuous median patch flavous. Clothing much as in preceding species.

Head with eyes, mandibles, and antennæ as in preceding species. Apical joint of maxillary palpi large and conspicuously notched on outer side. *Prothorax* with outlines and discal impressions as on preceding species, but with smaller punctures. *Elytra* much as in that species, except that the costal elevations are even less pronounced. *Legs* long and thin. Length, $6\frac{1}{4}$ - $6\frac{1}{2}$ mm.

Hab.—N.S.W.: Canterbury, near Sydney (H. J. Carter), Galston (A. M. Lea).

In general appearance strikingly close to the preceding species, but the apical joint of the palpi with a strong, median notch; the notch rendered more conspicuous by the space behind it being pale and membranous (it is much as on *C. incisa*) the hind-femora also are no stouter than the others; and the basal segment of the abdomen is quite distinct; the genitalia of the type are very conspicuous. *C. sloanei*, which it somewhat resembles, has, in the male, a conspicuous basal appendage to the apical joint of the palpi. The undersurface (except the three median segments

of the abdomen, which are deeply infuscated) is paler than the prothorax and elytra, these being of a rather bright flavous; the infuscation of the legs is not very deep. The dilated, sutural patch is much as in the preceding species.

The five females commented upon, under the preceding species, may possibly belong to this one, but the abdomen of each is entirely pale (as in the male of that species), not bicolorous (as in the male of this species).

COPIDITA TENUICORNIS, n.sp.

♀. Pale flavous, tips of mandibles blackish, pronotum with three, conspicuous, but not very sharply defined, infusate lines, elytra with very feeble infusate lines.

Head rather large, with irregularly distributed and not very large, but sharply defined punctures; mandibles bifid. Eyes large, prominent, widely notched, and rather closer together than usual in the genus. Antennæ very long and thin, eleventh joint moderately curved, distinctly longer than tenth, and with a vague remnant of doubling at the apical third. *Prothorax* slightly longer than wide, sides gently dilated from near the base, which is narrowly upturned, with a shallow and vaguely impressed, irregular, median line, and feeble impressions elsewhere; with fairly dense punctures. *Elytra* much wider than prothorax, each with four discal elevations, of which the third (apart from its colour) is scarcely traceable; with dense but rather ill-defined punctures. Fifth segment of *abdomen* rather long, its tip rounded. *Legs* rather long and thin. Length, 12-15 mm.

Hab.—Queensland: Cairns (E. Allen).

The three specimens before me are apparently all females; they are not very close in appearance to any previously described species. The infuscated lines on the elytra are fairly distinct to the naked eye, but less defined under a lens, and are due to the elevations being somewhat paler than the adjacent parts. The antennæ are unusually thin, and extend to the tip of the elytra. The prothoracic punctures are sharply defined on one specimen, much more so than on the type.

COPIDITA GRACILIS, n.sp.

♂. Flavous; tips of mandibles blackish, elytra with an infuscate, purplish vitta, extending from each shoulder to near the apex. Rather densely clothed with short, somewhat golden pubescence.

Head rather convex; with sharply defined but rather sparse and small punctures, becoming crowded about base; mandibles bifid. Eyes large, rather shallowly notched in front. Antennæ long and thin, eleventh joint slightly shorter than tenth, and conspicuously semi-double. *Prothorax* much longer than wide, sides gently dilated from near base to near apex; base narrowly upturned, with three, very vague, discal impressions; with dense and sharply defined punctures, larger and less crowded along middle than elsewhere. *Elytra* much wider than prothorax; each with two, rather distinct, costal elevations; with dense and sharply defined, but somewhat asperate punctures. Apical segment of *abdomen* conspicuously bilobed. *Legs* long and thin. Length (♂♀), 8-9½ mm.

♀. Differs in being rather more robust, prothorax shorter, apical segment of abdomen longer, with the tip rounded, and the legs and antennæ slightly shorter.

Hab.—Queensland: Little Mulgrave River (H. Hacker).

With the general outlines of *C. apicifusca*, but rather flatter; antennæ not quite so thin, with the terminal joint distinctly shorter; more shining, and less densely clothed, and with all the appendages and the undersurface pale. The elytral vittæ on the male are very conspicuous; from above, they appear to be marginal, from the base to near the apex; but, from the sides, the margins are seen to be narrowly flavous; on the female, the vittæ are distinct on the shoulders, but are little more than vague infuscations posteriorly. The joints of the palpi are elongate, and scarcely differ sexually; the genitalia of the type-male are conspicuously protruding.

COPIDITA FLAVA, n.sp.

♂. Flavous, opaque; tips of mandibles blackish. Densely clothed with very short, somewhat golden pubescence.

Head rather convex between eyes, vaguely depressed in front; with dense and sharply defined, but rather small punctures; mandibles bifid. Eyes large, conspicuously (but not deeply) notched in front. Antennæ long and thin, eleventh joint distinctly shorter than tenth, and with scarcely a trace of doubling. *Prothorax* distinctly longer than wide, sides moderately inflated near apex, base narrowly upturned, with three, vague, discal impressions; punctures much as on head. *Elytra* much wider than prothorax; each with four, discal costæ, of which the third is scarcely traceable. Length ($\sigma\varnothing$), $8\frac{1}{2}$ - $10\frac{1}{2}$ mm.

\varnothing . Differs in being more robust, with somewhat shorter prothorax, antennæ, and legs.

Hab.—Queensland (E. Allen).

In general sculpture fairly close to *C. apicifusca*, but entirely pale (except for the eyes and tips of mandibles), with somewhat different clothing and punctures, and slightly stouter antennæ; from the preceding species, it differs in being opaque, the punctures less conspicuous, prothorax more dilated to near apex, &c. The surface of the elytra could fairly be regarded as shagreened, as the punctures are much smaller, denser, and more asperate than on the prothorax. The apical segment of the abdomen is similar sexually, but from it, on the type-male, the tip of an ædeagus is protruding; and, from the type-female, an ovipositor; the palpi have the apical joint rather longer on the male than on the female.

CURCULIONIDÆ.

EPACTICUS SUTURALIS, n.sp.

Castaneous; head and rostrum black, funicle, club, tarsi, and undersurface almost black. Densely clothed with white, depressed, stout setæ or scales, conspicuously denser on scutellum, suture, sides of mesosternum and of metasternum than elsewhere; elytra, in addition, with some conspicuous setæ.

Rostrum slightly longer than prothorax, moderately curved; apical two-thirds shining and with minute punctures, basal third with rows of large, partially concealed punctures. Antennæ thin, inserted slightly nearer base than apex of rostrum; club rather

short. *Prothorax* about as long as wide, sides moderately rounded, base slightly wider than apex; with dense, partially concealed punctures. *Elytra* elongate, distinctly wider than prothorax, parallel-sided to near apex; with rows of rather large punctures, more or less concealed by clothing. Length, $2\frac{1}{4}$ - $2\frac{1}{2}$ mm.

Hab.—Victoria (Australian Museum).

Allied to *E. nigrirostris* but larger, and with the clothing on the suture conspicuously white throughout; at first glance, the upper surface is strongly suggestive of several species of *Misophrice*. The sixth interstice on each elytron towards the apex is more densely clothed than the adjacent surface, but not so conspicuously as the suture. The four specimens before me are probably females.

EPACTICUS ASPRATILIS, n.sp.

Black, parts of legs diluted with red, scape and club castaneous, funicle somewhat darker. Densely clothed with large scales, on the upper surface mostly of a dingy white and fawn-coloured, on the lower surface and legs mostly white with a silvery gloss.

Rostrum long, thin, and lightly curved; apical half shining, and with rows of small punctures, basal half with larger punctures, but more or less concealed by clothing. Antennæ thin, inserted just perceptibly nearer base than apex of rostrum; club moderately long. *Prothorax* slightly longer than wide, sides moderately rounded, base slightly wider than apex; punctures dense but normally concealed. *Elytra* considerably wider than prothorax, almost parallel-sided to apical third; with rows of fairly large, concealed punctures. Length, 3 mm.

Hab.—Western Australia: Geraldton (A. M. Lea).

More robust than any previously described species of the genus. The rostrum is less curved than on *E. ruber*, but the club is much the same. In some lights, the scales on the head and rostrum have a silvery gloss, but most of the scales on the upper surface are dingy; they are large and rough, and (except where abraded) completely conceal the derm; from above, the elytra appear to be uniformly and densely clothed with stout scales; but, from the

sides, some semi-decumbent setæ are visible. The type appears to be a female, and its rostrum is about once and one-half the length of the prothorax.

CERAMBYCIDÆ.

MERIONCIDA.

Pascoe, Trans. Ent. Soc. Lond., (2), iv., p.237; (3), iii., p.570.

This genus (represented by many species in the Malay Archipelago and New Guinea) does not appear to have been previously recorded from Australia. It is distinct by the acutely pointed elytra, pedunculate hind-femora, large basal segment of abdomen (which is also curiously clothed towards the apex in the male), deep impressions behind the clypeus, and very finely faceted eyes. In our catalogues, it should be placed near *Mecynopus*; it is a very interesting addition to the Australian genera of longicorn-beetles.

MERIONCIDA AUSTRALIÆ, n.sp. (Plate xxix., fig.8).

♂. Bright flavous; swollen parts of femora, hind-tibiæ, antennæ, and apical half of elytra black or blackish. Elytra and base and sides of prothorax sparsely pubescent, head with a few hairs between eyes; rest of upper surface glabrous.

Head rather long; with coarse punctures between eyes, small and sparse elsewhere; a deep, curved, clypeal suture, which has a short, deep impression extending backwards from its middle. Eyes deeply notched, distant from prothorax. Antennæ extending to tips of elytra, first joint not much longer than third, third and fourth cylindrical and equal, the following ones somewhat wider and depressed, eleventh slightly narrower and slightly longer than tenth. *Prothorax* about as long as greatest width, with a deep, bisinuate impression near apex, behind same with five longitudinal elevations; the median are elliptic and slightly posterior to the others; the outer ones lateral and obtuse; with rather sparse punctures in the depressed parts. *Elytra* much wider than prothorax, suddenly and strongly narrowed from near

base, with the tips acutely pointed; with almost regular rows of large punctures, but becoming irregular posteriorly; a rather obtuse carina along middle of apical fourth. Basal segment of *abdomen* almost as long as the rest combined, second large, widely semicircularly notched, the notch fringed with golden hairs, the following segments also with dense hairs in middle. Four front *legs* moderately long, the femora subpedunculate; hindlegs much longer, the femora strongly pedunculate, hind-tibiæ curved, with numerous, short spines, and a strong one at inner apex. Length, 8 mm.

Hab.—Queensland: Kuranda (H. Hacker). Unique.

The antennæ are uniformly dark, except that towards the tip there is a slight dilution of colours, but not one of the joints is conspicuously pale, as on many species of the genus; the basal joint of the hind-tarsi is black [the others are missing]; the dark apical portion of each elytron extends slightly beyond the middle on the inner side, but not to the middle on the outer side.

CHRYSOMELIDÆ.

OOMELA COCCINELLOIDES, n.sp.

Bright flavous, apical half of antennæ somewhat infuscated, elytra black, with a conspicuous, irregular, transverse spot on each (or interrupted fascia), slightly before the middle.

Head impunctate; with a vague, medio-basal impression. *Prothorax* almost four times as wide as long, base almost evenly rounded, sides rather strongly rounded in front; with fairly numerous, but very minute punctures. *Elytra* with rather strongly rounded sides; with rows of very small punctures, almost disappearing posteriorly; interstices very minutely punctate. Length, 4 mm.

Hab.—Queensland: Cairns (E. Allen). Unique.

The transverse mark on each elytron extends fairly close to the side and suture, but touches neither; it is evident close to the suture. The abdominal lamellæ are small. The elytral epipleuræ are concave throughout. In general appearance, the type is much like some small *Coccinellidæ*.

OOMELA BIMACULATA, n.sp.

Reddish-castaneous, elytra blackish with a greenish gloss, and with two reddish spots; most of antennæ infuscated.

Head with sparse and very feeble punctures, becoming slightly more distinct on clypeus. *Prothorax* at base fully four times as wide as long, sides rather strongly rounded in front; with numerous, but very small punctures. *Elytra* wider than prothorax at base, sides evenly rounded; with regular rows of rather small punctures, interstices almost impunctate. Length, $2\frac{3}{4}$ mm.

Hab.—Queensland: Port Denison (Macleay Museum).

The character distinguishing this species from *O. elliptica* in the table is a rather feeble one; but the two species differ as well by the former being much smaller, rather more elongate, base of elytra proportionately wider than base of prothorax, and to some extent in the punctures. The spot on each elytron is fairly large but not very sharply defined, and is placed at about the basal third (on the third, and on part of the second and fourth interstices), the extreme base of the elytra, and the suture near the base are also somewhat obscurely reddish; there is a vague infuscation of the base of the head in both specimens. The abdominal lamellæ are rather short.

OOMELA DISTINCTA, n.sp. (Plate xxix., fig.9).

Bright reddish-flavous; apical two-thirds of antennæ, lateral margins of prothorax, a transverse subelliptic spot behind scutellum, an oblique somewhat sinuous latero-median stripe on each elytron, a bisinuate subapical fascia, and most of the legs black, or deeply infuscate.

Head with some small punctures on clypeus, but elsewhere almost impunctate. *Prothorax* almost four times as wide as long, sides feebly rounded on basal half, more strongly on apical; with very minute punctures. *Elytra* not much wider than prothorax, sides gently rounded; with regular rows of rather small punctures, becoming much smaller posteriorly; interstices sparsely and minutely punctate. Length, $3\text{-}3\frac{1}{4}$ mm.

Hab.—N.S.W.: Gosford (H. J. Carter).

The elytral markings are identical on the three specimens under examination, but the degree of infuscation of the sides of the prothorax varies. The abdominal lamellæ are small, and usually concealed by the legs.

Table of the Species of *Oomela*.

- A. Elytra uniformly dark.
- a. Elytra purple..... *pulchripennis*.
- aa. Elytra not purple *elliptica* (partim).
- AA. Elytra dark, each with one pale spot.
- b. The spot sharply defined, and transverse..... *coccinelloides*.
- bb. The spot less sharply defined, and rounded.
- c. An infuscate stain on pronotum adjacent to scutellum *elliptica* (partim).
- cc. Without such a stain *bimaculata*.
- AAA. Elytra not as in A or AA.
- B. Elytra with a large, black spot surrounding scutellum *trimaculata*.
- BB. Elytra with a transverse, isolated spot close behind scutellum *distincta*.
- BBB. Elytra either immaculate, or with markings not as in B or BB *variabilis*.

GEOMELA LAMELLIFERA, n.sp.

Blackish or piceous-brown, with a slight metallic gloss; the appendages somewhat paler, but not strikingly so.

Head with numerous, distinct punctures; with two, small, round foveæ in front. *Antennæ* rather long, first joint stout, its apex subglobular, third as long as fourth and fifth combined, eighth feebly, ninth and tenth moderately transverse. *Prothorax* more than thrice as wide as long, base gently rounded; punctures much as on head but not quite so dense, and absent close to the margins. *Elytra* with sides gently rounded, and subcontinuous with those of prothorax; with regular rows of fairly large punctures; interstices densely and minutely punctate. Intercostal process of *prosternum* rather feebly elevated in front. *Abdomen* with basal lamellæ, each with a conspicuous, acute process, projecting obliquely backwards almost to apex of segment. Length, $2\frac{1}{4}$ mm.

Hab.—W.A.: Beverley, Pinjarrah (A. M. Lea).

The process on each of the abdominal lamellæ is notably longer than in *G. blackburni*, and the punctures on the head are more evenly distributed; on the latter species they are confined to a rather narrow space between the eyes; the antennæ also are longer and thinner than in that species. On close examination, the whole of the upper surface (more noticeably on the head than elsewhere) appears to be finely shagreened.

GEOMELA TASMANIENSIS, n.sp.

Black, with a distinct coppery gloss; appendages (five apical joints of antennæ blackish) reddish.

Head with dense and small but distinct punctures, and with some rather coarse ones between eyes; two small foveæ in front. Antennæ moderately long, first joint rather stout, third almost as long as fourth and fifth combined, seventh to eleventh rather wide, seventh moderately, the eighth to tenth strongly transverse. *Prothorax* with dense, small punctures, some larger ones on sides and across middle of apex. *Elytra* with regular rows of fairly large punctures; the interstices with numerous small but distinct ones. Intercostal process of *prosternum* rather feebly elevated in front. Basal lamellæ of *abdomen* large, each with a subtriangular process. Length, 3 mm.

Hab.—Tasm.: Waratah, Launceston (A. M. Lea).

The tip of the abdomen is obscurely reddish, and the femora are lightly infuscated. The outlines of the prothorax and elytra are much as on the preceding species, and on *G. blackburni*; but the process on each of the abdominal lamellæ is conspicuously shorter than on those species, and is triangular in shape.

GEOMELA MONTANA, n.sp.

Black, with a slight greenish gloss, part of head and under-surface more or less obscurely reddish, appendages paler.

Head with fairly numerous but small punctures; clypeal suture curved, well-defined, and without foveæ. Antennæ rather long and thin, third joint about as long as fourth and fifth combined, the five apical ones gently increasing in width but none transverse. *Prothorax* more than thrice as wide as long; with numer-

ous, minute punctures, and some slightly larger but still small ones. *Elytra* with regular rows of fairly large punctures; the interstices with very small ones. Intercostal process of *prosternum* rather narrowly elevated. Basal lamellæ of *abdomen* large, and rounded posteriorly. Length, 3 mm.

Hab.—Victoria : Mount Buffalo (H. J. Carter).

The general outlines are much as those of *G. blackburni*, but the abdominal lamellæ are very different. The front coxal cavities are apparently open behind, but the type, being unique, has not been broken to make sure of this.

GEOMELA NOBILIS, n.sp.

Dark metallic blue, with a purplish gloss; undersurface, femora, and antennæ purple, scutellum bronzy.

Head with minute punctures, and with some larger ones about eyes and on clypeus. Eyes more transverse than usual. Antennæ moderately long, third joint as long as fourth and fifth combined, seventh lightly transverse, the four following ones somewhat wider. *Prothorax*: about thrice as wide as long; with numerous small but distinct punctures, and a few of larger size. *Elytra* with rows of not very large but sharply defined punctures; the interstices with sparse, and rather minute ones. Intercostal process of *prosternum* wedge-shaped. Basal lamellæ of *abdomen* large, rounded posteriorly, bronzy and shagreened. *Tibiae* wide, incurved near apex, basal joint of tarsi strongly inflated. Length, 5 mm.

Hab.—N.S.W.: Jenolan (J. C. Wiburd).

The largest and most beautifully coloured of the genus. The type, being unique, has not been broken to make sure of the front coxal cavities, but they appear to be rather widely open. The general outlines are much as those of *G. blackburni*, but the eyes, when seen from the side, appear to be fully four times as wide as long. The clypeal suture is feebly defined, but the clypeus itself, owing to its deeper colour and larger punctures, is very conspicuous. The abdominal lamellæ are larger than in any other species of the genus. The type, judged by the tarsi, is a male.



Table of the Species of *Geomela*.

- A. Abdominal lamellæ each with a process projecting conspicuously backwards.
- a. Process subtriangular throughout *tasmaniensis*.
 - aa. Process with its apical portion parallel-sided.
 - b. Process produced backwards almost to apex of segment *lamellifera*.
 - bb. Prothorax terminated at least one-half from apex.... *blackburni*.
- AA. Abdominal lamellæ evenly rounded posteriorly.
- B. Of comparatively large size (5 mm.), and more or less purplish *nobilis*.
 - BB. Much smaller ($3\frac{1}{2}$ mm. at most) and not at all purplish.
 - C. Prothorax and elytra with margins more or less flavous.
 - c. Third joint of antennæ almost as long as fourth and fifth combined *circumflava*.
 - cc. Third joint scarcely, if at all, longer than fourth... *bryophaga*.
 - CC. Prothorax and elytra with margins not paler than disc.
 - D. Bifoveate between antennæ *bifoveata*.
 - DD. Not bifoveate there *montana*.

EXPLANATION OF PLATE XXIX.

- Fig. 1.—*Xylophilus microcerus* Lea.
 Fig. 2.—*Xylophilostenus octophyllus* Lea; antenna.
 Fig. 3.—*Pseudolytus tarsalis* Lea; hind-tarsus.
 Fig. 4.—*Copidita incisa* Lea; palpus.
 Fig. 5.—*C. medioflava* Lea; palpus.
 Fig. 6.—*C. medioflava* Lea; elytral markings.
 Fig. 7.—*C. pachymera* Lea; elytral markings.
 Fig. 8.—*Merionada australis* Lea.
 Fig. 9.—*Oomela distincta* Lea.